DOCUMENT RESUME

ED 236 644 CS 207 919

AUTHOR Williams, Connie K.
TITLE A Procedure to Evaluate Cognitive Requirements of Beginning Reading Materials.
PUB DATE [81]
NOTE 13p.; For related documents, see CS 207 904-945.
PUB TYPE Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Basal Reading; *Beginning Reading; Cognitive Processes; Primary Education; *Readability; *Reading Material Selection; *Textbook Evaluation
IDENTIFIERS *The Research Instruments Project

ABSTRACT

Designed to assess the cognitive requirement expected or implied in beginning reading materials and in their instructional suggestions and to determine whether these materials are appropriate to the cognitive development of the children who will use them, this instrument is for use by evaluators with the first reader in a basal series. It directs the rater to become familiar with the organization, format, and general philosophy of the series to be reviewed. The main portion of the procedure consists of 11 items, each of which gives a brief explanation and examples of a certain aspect to be examined in the reader under consideration. Validity, reliability, and normative data are included. (This document is one of those reviewed in The Research Instruments Project (TRIP) monograph "Measures for Research and Evaluation in the English Language Arts, Volume 2," published by the Committee on Research of the National Council of Teachers of English in cooperation with the ERIC Clearinghouse on Reading and Communication Skills. The TRIP review, included here as an introduction to the instrument, describes the instrument's category (reading), title, author, date, age range, (primary), purpose, and physical characteristics.) (JL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED236644

A Procedure to Evaluate Cognitive Requirements of Beginning Reading Materials.

The measurement instruments contained in this document have been reviewed in a monograph (cited below) edited by William T. Fagan, Charles Cooper, and Julie Jensen, for The Research Instruments Project (TRIP), and funded by a grant from the Trustees of the NCTE Research Foundation:

Measures for Research and Evaluation
in the
English Language Arts
Volume II

The purpose of the editors has been to select and review measurement instruments pertaining to all aspects of research and evaluation in the English language arts, e.g. language and language development, literacy, literature, reading (including comprehension, teacher-pupil interaction, etc.), writing, and teacher knowledge and attitudes. In order to make some of the actual instruments reviewed more readily available, the ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS) has cooperated with the editors by processing selected instruments into the ERIC system (see the 42 documents assigned Clearinghouse accession numbers CS 207 904-945).

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Connie K. Williams

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 207919

Category: Reading

Title: A Procedure to Evaluate Cognitive Requirements of Beginning Reading Materials.

Author: Connie K. Williams

Age Range Primary

Description of Instrument:

Purpose: The purpose of this instrument is to assess the cognitive requirement expected or implied in beginning reading materials and the instructional suggestions and whether they are appropriate to the cognitive development of the children with whom they are to be used.

Date of Construction:

Physical Description: The instrument includes an introduction and directions for use. For consistency and so various materials can be compared, the rater is directed to examine the first reader from the basal series to be evaluated. It should be remembered that the selection of the first reader is for consistency when various series are to be compared, and that this does not preclude the use of the procedure with other materials for beginning readers.

The main portion of the procedure consists of eleven items. Each item gives a brief explanation and examples of a certain aspect to be examined in the reader under consideration. A response from three alternatives is to be chosen for each item which best describes the material. A section is provided for totals to be determined. Three statements concerning the appropriateness of beginning reading materials for use with preoperational children are provided. After totals are analyzed, the statement which is most appropriate for the materials being reviewed is to be chosen.

The procedure was not designed to replace other rating devices and scales which can be used to evaluate other aspects of reading materials. Readability scales and other such procedures are recommended for use in conjunction with the procedure to evaluate cognitive requirements.

Following is a sample item:

Are children required to hold in mind several things at one time? To obtain this information, analyze the activities suggested in the guided reading lessons as well as the workbook activities. An example of a workbook activity which requires holding more than one thing in mind is: "Color all the balloons with the long

a's red, and color all the balloons with the short a's green except those followed by a silent e which should be colored blue." Be careful not to limit your examination to only this type of example.

_____ No activities found which require child to hold in mind several things at one time

_____ Few activities (1 or 2) found which require child to hold in mind several things at one time

_____ Several activities (3 or more) found which require child to hold in mind several things at one time.

Evidence:

In each section of the procedure, the first choice would indicate that the material is more desirable than if the third choice is checked. The middle choice is more desirable than the third but less desirable than the first.

After analysing the totals, choose the statement which seems to be appropriate for the material which was reviewed.

_____ The materials are generally appropriate for use with preoperational children.

_____ The materials are somewhat appropriate for use with preoperational children.

_____ The materials are not appropriate for use with preoperational children.

Validity, Reliability, and Normative Data:

Development of the Procedure to Evaluate Cognitive Requirements of Beginning Reading Materials involved four phases. First was an examination of the literature to serve as a basis for the development of the assessment procedure. Included was an examination of translations of the original works of Piaget as well as secondary works which provided interpretive information about his developmental theory and on which the instrument was based.

The second phase was also accomplished through the literature review. Research evidence and expert opinion were examined for identification of major principles for inclusion in the procedure to evaluate beginning reading materials in terms of cognitive requirements. After major principles were identified from the literature, validation of the principles was accomplished by judgments from a panel of experts in the fields of early childhood education, reading, and psychology. The panel members were selected from the faculty and participants of the Interdisciplinary Institute in Reading and Child Development (Waller, 1977) or from suggestions of those participants. Upon consent to participate in this process, seven panel members were asked to

rate each principle in terms of appropriateness for use with preoperational children and also for importance for inclusion in the procedure.

Panel members were asked to list additional activities, methods, or requirements which they would consider inappropriate for reading instruction with preoperational children; however, no additional principles were suggested. Based on the responses of the experts on the panel, coverage seemed to be complete, and content validity was supported. A weighted score was assigned to each response from panel members. A predetermined score was needed for inclusion of a principle in the exploratory version of the procedure. On this basis, the procedure was developed.

The third phase of the study involved the actual development of the procedure. The ratings and comments of the panel of experts guided the development. Consideration was also given to factors such as ease of use, time and training required, and objectivity of the procedure.

The fourth phase consisted of a pilot study of the procedure. Educators such as those who might participate in textbook selection decisions were asked to use the procedure and answer questions concerning its use. These educators represented five groups--first grade teachers, elementary school principals, elementary school librarians, system-level supervisors, and college or university professors. Three people from each group were used for a total of 15 participants in the pilot study.

So that comparisons could be made, all participants were instructed to use the same sample of instructional material. The text used was from a series based on synthetic phonics. Although the results of the pilot study were not totally consistent, a reasonable degree of consistency across raters was obtained.

The procedure was then used by the researcher with samples of three other types of reading programs--an analytic program, a linguistic program, and a program with literary emphasis. Use of the procedure with different approaches showed that the procedure discriminates between types of instructional material. Pilot study results were used to revise the procedure.

Related Documents:

Walter, T.B. Think first, read later! Piagetian prerequisites for reading. Newark, Delaware: International Reading Association, 1977. (ED 146 570)

Directions

The first reader (rather than preprimer or primer) should be selected from the materials to be evaluated. Teacher's editions, student text, workbooks and other supplementary materials should be available for examination.

Some time should be spent reviewing the materials to become familiar with organization, format, and general philosophy. If the rater is unfamiliar with the material, two or three typical passages should be chosen for review. The entire material may be used as a basis for the judgment if the rater is already familiar with the material. Examination should include the actual stories to be read by the children and also the dialog suggested in the teacher's edition for use by the teacher with the children. Activities suggested in both the teacher's edition and the workbook should also be examined.

Information for some parts of the procedure can be obtained from the table of contents for the particular book and also from the introduction and bibliography for the entire program which is usually included in the teacher's edition for each level. These sections should be examined carefully.

Publisher of series _____

Name of book being reviewed _____

Level _____ Copyright date _____

Each question below should be considered for the materials being examined. Explanations and examples are included to help you determine exactly what kind of information is being sought. For each section, there are three possible answers. Put a check in front of the one which best describes the materials you are examining. The space below each item should be used to make notes and comments. These should include specific examples from the materials which would justify the response given. Include page numbers on which examples of the item or question are located. These comments would be helpful in discussing differences with other raters and also for later review of the same material.

1. In the introduction to the reading series, is there a discussion of the developmental characteristics of children? Is attention given to levels or stages of cognitive development and how these might relate to reading instruction?

   _____ Much discussion of developmental characteristics

   _____ Moderate discussion of developmental characteristics

   _____ Little or no mention of developmental characteristics

   Evidence:

2. Is an assessment device or checklist included in the teacher's edition by which to determine the developmental stage of the children with whom the material will be used? Is there any indication that developmental level should be determined? Developmental level as used here is not the same as reading level (as in independent, instructional, and frustration level). While such levels are important to reading instruction, determination of developmental level is different and will contribute additional information.

_____ Checklist or assessment device provided

_____ Statement included that determination of developmental level is important

_____ No mention of determining developmental level

Evidence:

3. Does the bibliography in the teacher's edition include references for suggested reading which would provide information concerning cognitive development and its relationship to beginning reading instruction? Examples of such authors include, but are not limited to, Piaget, Almy, Elkind, and MacGinitie. Also notice book and article titles to determine possible related works.

_____ Moderate to extensive listing of related work

_____ Few such books or articles included

_____ No evidence of such books or articles being suggested

Evidence:

4. In the area of skills development, is there an emphasis on rule learning and application? Information should be obtained from the teacher's manual, student text, and workbook. Notice the difference between rules which call for simple association and those which are "higher level" rules. An example of simple association is, "When you see the letter b, it is usually pronounced /b/." A more difficult rule is, "If two vowels come together, the first one probably says its name, and the second one probably is silent," or "If g is followed by a, o, or u, it will usually have the hard sound."

_____ In most cases, only rules of simple association are used

_____ Moderate amount of emphasis on rule learning and application with some inclusion of higher level rules as well as those of simple association

_____ Major part of skill development devoted to rule learning with a large portion of those rules being higher level rules

Evidence:

5. Are activities included in which the emphasis is on the "parts" rather than the "whole"? This could include phonetic analysis, structural analysis and breaking reading into parts or skills. Both teacher directed and workbook activities should be considered. Is there an emphasis on separate skills of reading, or is there an effort to treat reading as a whole process of which children understand the purpose?

_____ Little or no emphasis on parts
Reading is emphasized as a total process

_____ Some phonetic and structural analysis included
Usually balanced with other types of activities

_____ Emphasis on phonetic and structural analysis
Separate skills are stressed

Evidence:

6. Are teachers encouraged by the teacher's edition to explain terms such as "word," "letter," and "sound"? Is there any indication to the teacher that children may not understand these terms and may not perceive them in the same way as adults?

_____ Explanation of common terms used for instruction

_____ Some attention to explanation of such words

_____ Use of these words without explanation

Evidence:

7. Are children required to hold in mind several things at one time? To obtain this information, analyze the activities suggested in the guided reading lessons as well as the workbook activities. An example of a workbook activity which requires holding more than one thing in mind is: "Color all the balloons with the long a's red, and color all the balloons with the short a's green except those followed by a silent e which should be colored blue." Be careful not to limit your examination to only this type of example.

_____ No activities found which require child to hold in mind several things at one time

_____ Few activities (1 or 2) found which require child to hold in mind several things at one time

_____ Several activities (3 or more) found which require child to hold in mind several things at one time.

Evidence:

8. Are metaphors and analogies used in the materials? This would include both the student text and dialog suggested for the teacher during the guided reading lesson. Examples would be: "Yellow is the color of happiness," or "The wind was a thief in the night."

_____ No metaphors and/or analogies

_____ Moderate use of metaphors and/or analogies

_____ Extensive use of metaphors and/or analogies

Evidence:

9. Are proverbs and/or fables used in the material? Check the table of contents and the index as well as looking through the text and teacher's edition for indications of proverb and/or fable use. Proverbs and fables are considered here in the traditional sense. That is, a moral or lesson must be emphasized. The lesson may be included as part of the story or directions for emphasizing the moral or lesson may be included in the teacher's plans in the manual.

_____ No proverbs or fables found in the material

_____ Few (1 or 2) proverbs or fables found in the material

_____ Several (3 or more) proverbs or fables found in the material

Evidence:

Answer the following questions (10 and 11) if you know the specific children with whom the materials will be used.

10. Survey the stories in the text. Think about the experiences which children would need to have had to relate to these stories. Is it likely that the children with whom the materials will be used will have had these experiences or can be provided with adequate vicarious experience? An example would be a story about a foreign country with which a particular child or group of children might not be able to relate.

_____ All stories are appropriate for experiences of the children

_____ Most stories are appropriate for experiences of the children

_____ Many stories included for which children do not have adequate experiential background

Evidence:

11. Notice the language used in the text. Will the children with whom these materials will be used be likely to relate to and understand the language?

_____ Language is appropriate to this group of children

_____ In most cases, language is appropriate to this group of children

_____ Language is not appropriate to this group of children

Evidence:

Interpretation of Results

The procedure is designed so that a general statement concerning the appropriateness of a given piece of reading material for use with preoperational children can be made. In each section of the procedure, the first choice would indicate that the material is more desirable than if the third choice is checked. The middle choice is more desirable than the third but less desirable than the first.

Review your choices and total the number for each position.

_____ first choices made

_____ middle choices made

_____ last choices made

The numbers should total nine or eleven if the optional section was completed. After analyzing the totals, choose the statement which seems to be most appropriate for the material which was reviewed.

_____ The materials are generally appropriate for use with preoperational children.

_____ The materials are somewhat appropriate for use with preoperational children.

_____ The materials are not appropriate for use with preoperational children.